



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/315,973	05/21/1999	SHASHANK MERCHANT	50100-783	7187

20277 7590 05/21/2003
MCDERMOTT WILL & EMERY
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

LY, ANH VU H

ART UNIT PAPER NUMBER

2662

DATE MAILED: 05/21/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/315,973

Applicant(s)

MERCHANT ET AL.

Examiner

Anh-Vu H Ly

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on CPA filed April 28, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 7-13 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Prosecution Application

1. The request filed on April 28, 2003 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/315973 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gridley (US Patent No, 6,522,656) in view of Murthy et al (US Patent No. 5,515,376).

With respect to claim 1, Gridley discloses in Figure 1, an internal architecture of an Ethernet switch comprising four LAN cards 100A-100D each have eight Ethernet ports P1-P8 for sending and receiving Ethernet packets (a plurality of ports for receiving and transmitting data packets). Gridley discloses in Figs. 2-3, the relationship of a LAN card and a system card for determining and directing the received packets through the correct output LAN card and ports (a decision making engine responsive to received data packets for directing the received data packets to the ports selected for transmission of the received data packets). Gridley discloses in Fig. 2, each LAN card comprising a packet RAM 135 for storing received packets (a plurality of queuing devices corresponding to the plurality of ports for queuing data blocks representing the data packets received by the corresponding ports). Gridley discloses (col. 4, line 2-19) that the

Art Unit: 2662

address processor 220, as illustrated in Fig. 3, updates and accesses an address RAM 225, which contains an address look-up table and other forwarding related decision tables including port states (logic circuitry responsive to the plurality of queuing devices for processing the data blocks in accordance with a prescribed algorithm to determine destination information).

Wherein, the look-up tables indicate to which port P1-P8 of which LAN card 100A-100D a particular packet must be forwarded to reach the device indicated by the destination address contained in that packet's header (a forwarding circuit responsive to the logic circuitry for identifying at least one transmit port).

Gridley does not disclose a traffic capture mechanism for enabling one port to output data transferred via selected ports of plurality of ports.

Murthy discloses (col. 2, lines 30-34) monitoring of any or all network segments (multiple selected ports) on a multi-port bridge or router may be carried out from a network segment on one port, referred to as a monitoring port (a traffic capture mechanism for enabling one port to output data transferred via multiple other selected ports of plurality of ports).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of monitoring data from any or all network segments through a monitoring port in Gridley's switching network, as suggested by Murthy, to monitor data packets and collect related information for network analysis.

With respect to claims 2 and 3, Gridley discloses an Ethernet switch for data communications between network stations. Gridley does not disclose one port is a sniffer port for connecting to a probe for monitoring data traffic. Murthy discloses (col. 2, lines 40-44) that

Art Unit: 2662

to carry out monitoring, a network monitor may be connected to the monitoring port (sniffer port) and will thus be able to view traffic just as it were connected directly to a monitored port (one port is a sniffer port for connecting a probe for monitoring data traffic). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of connecting a network monitor to the monitoring port to view traffic of the monitored port in Gridley's switching network, as suggested by Murthy, to monitor data packets and collect related information for network analysis.

With respect to claim 4, Gridley discloses an Ethernet switch for data communications between network stations. Gridley does not disclose a sniffer port configuration circuit for selecting a sniffer port among plurality of ports. Murthy discloses in Fig. 1, port 4 is chosen as the monitoring port among a plurality of ports of the bridge (a sniffer port configuration circuit for selecting the sniffer port among plurality of ports). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of selecting a monitoring port among plurality of ports in Gridley's switching network, as suggested by Murthy, to monitor data packets and collect related information for network analysis.

With respect to claim 5, the limitation recited in claim 5 is addressed in the rejection of parent claim 1. Wherein, Murthy discloses (col. 2, lines 30-34) monitoring of any or all network segments (multiple selected ports) on a multi-port bridge or router may be carried out from a network segment on one port, referred to as a monitoring port (a sniffed port configuration circuit for selecting multiple sniffed ports among a plurality of ports).

With respect to claim 6, Gridley discloses an Ethernet switch for data communications between network stations. Gridley does not disclose sniffer port configuration circuit is configured to enable and disable monitoring of data traffic on multiple sniffed ports. Murthy discloses (col. 18, lines 30-35 and Fig. 1) that port monitoring is controlled from the supervisory access terminal 12. The network manager may identify monitored ports 3 and monitoring ports 10. When port monitoring is enabled, packets associated with the monitored ports 3 will be forwarded to monitoring ports 10 (configured to enable and disable monitoring of data traffic on multiple sniffed ports). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of controlling the process of port monitoring in Gridley's switching network, as suggested by Murthy, to monitor data packets and collect related information for network analysis.

With respect to claims 14-18, Gridley discloses in Figure 1, an internal architecture of an Ethernet switch comprising four LAN cards 100A-100D each have eight Ethernet ports P1-P8 for sending and receiving Ethernet packets (a communication network having a plurality of ports for receiving and transmitting data packets). Gridley discloses in Figs. 2-3, the relationship of a LAN card and a system card for determining and directing the received packets through the correct output LAN card and ports (a decision making engine for controlling data forwarding between the ports). Gridley discloses in Fig. 2, each LAN card comprising a packet RAM 135 for storing received packets (placing data blocks representing received data packets in a plurality of data queues to be processed by the decision making engine). Gridley discloses (col. 4, line 2-19) that the address processor 220, as illustrated in Fig. 3, updates and accesses an address RAM

Art Unit: 2662

225, which contains an address look-up table and other forwarding related decision tables including port states (processing data queues by logic circuitry in accordance with a prescribed algorithm to determine destination information). Wherein, the look-up tables indicate to which port P1-P8 of which LAN card 100A-100D a particular packet must be forwarded to reach the device indicated by the destination address contained in that packet's header (identifying at least one port for transmitting data packets based on the destination information).

Gridley does not disclose selecting multiplied sniffed ports among the plurality of ports for monitoring the data packets transferred via the sniffed ports and selecting a sniffer port among the plurality of ports to provide output of the data packets transferred via the sniffed ports. Murthy discloses (col. 2, lines 30-34) monitoring of any or all network segments (multiple selected ports) on a multi-port bridge or router may be carried out from a network segment on one port, referred to as a monitoring port (selecting multiplied sniffed ports among the plurality of ports for monitoring the data packets transferred via the sniffed ports and selecting a sniffer port among the plurality of ports to provide output of the data packets transferred via the sniffed ports).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of monitoring data from any or all network segments through a monitoring port in Gridley's switching network, as suggested by Murthy, to monitor data packets and collect related information for network analysis.

Art Unit: 2662

Allowable Subject Matter

3. Claims 7-13 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 703-306-5675. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

av
May 12, 2003


HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600